

LASCA Leaves



Los Angeles County Department of Arboreta and Botanic Gardens

HIGH WINDS RAVAGE TREES AT ARBORETUM IN WINTER STORMS

TREES AT THE Los Angeles State and County Arboretum suffered some brutal natural pruning when hurricane-force winds battered Arcadia on January 26. More than 200 trees were either damaged or destroyed by winds that Dan Martel, 28-year-veteran weather observer at the Arboretum estimated blew at about 80 miles-per-hour with gusts over 100 m.p.h.

Mr. Martel pointed out that the winds were a concentrated version of the Santa Ana winds that usually spread their force out over a larger area. In this storm, however, the draft traveled more like a narrow river, swooping low over Utah and up over the San Gabriel Mountains before slamming to earth once again in the Valley.

Although trees in all areas of the Arboretum were damaged, Mr. Martel observed a swathe of particularly heavy damage that seemed to follow

a path southwest from the Peacock Pavilion. The weather quirk that made this the warmest winter in 58 years also kept the wind damage from being much worse, he added. Because no rain had fallen since December 10, the firm ground anchored trees that might have otherwise been uprooted.

Oak root fungus (*Armillaria*) had previously weakened the roots of many of the large trees that did blow over, such as the Aleppo pine (*Pinus halepensis*) which crushed the new



Sandra Snider

A century-old blue gum (*Eucalyptus globulus*) narrowly missed both the marble walkway and the fountain in front of the Queen Anne Cottage when it toppled during a windstorm January 26.

gate near the picnic area. But one apparently healthy blue gum (*Eucalyptus globulus*), planted northwest of the Queen Anne Cottage veranda during the Baldwin era, lost its footing and crashed down, fortunately landing in the open area between the Cottage and the fountain.

Four types of trees were most affected by the winds, a fact that didn't surprise James Bauml, Arboretum taxonomist. "The jacaranda, chorisia, eucalyptus and erythrina are all known as being brittle," he said. Even among these vulnerable trees, however, the extent of the damage was unexpectedly severe. Wherever he looked, he said, he seemed to see jagged tears where limbs had been ripped from the jacaranda trees and the tops torn out of *Erythrina falcata* trees. A 30-year-old spotted gum (*Eucalyptus maculata*) in the Australian section was sheared off just above ground level, leaving a splintered stump about two feet in diameter. Although the wood of ficus trees is not considered fragile by experts,

he found several *Ficus retusa* along the road up Tallac Knoll and by the Tropical Greenhouse split in half or topped.

Mr. Bauml also noticed other peculiar effects the winds left in their wake. Dried palm fronds often litter the area after a storm, but the trees themselves normally survive high winds because of their flexible trunks and minimal wind resistance. However, one palm in the historical section was shredded lengthwise, and a specimen in the palm garden was uprooted. As he toured the grounds immediately after the storm, Mr. Bauml was struck by the poor condition of the bamboo (*Bambusa oldhamii*) along Baldwin Avenue. "It looked all dried out and beaten, as if the winds had sucked out all the moisture," he said.

The winds claimed one sentimental favorite of Arboretum visitors; the old bee tree on Tallac Knoll fell when a neighboring live oak toppled, knocking the hollow relic onto a nearby ficus tree which was also destroyed.

Although most of the shattered trees and branches had been cleaned up by the end of March, John Provine, superintendent, said corrective pruning will continue until the damaged trees have been reshaped and their natural forms restored as much as possible.

SUNDAY VISITORS THROG DEPOT FOR OPEN HOUSE

THE INAUGURAL Sunday afternoon opening of the Santa Anita Depot on February 5 was a great success. Almost 450 visitors toured the depot during the three hours that this popular local attraction was open.

According to acting depot chairman Dolores (Mrs. Glen) Ross, among those who stopped by were family groups, many students and older people who took advantage of the free tour. Visitors who did not enter the rest of the Arboretum grounds were not charged the regular admission fee. Members of the California Arboretum Foundation also attended.

Randy Ruiz, the 13-year-old son of Reuben Ruiz of Arcadia, spent part of the afternoon carefully measuring the depot. The boy, a railroad buff who has visited many of Southern California's landmark train depots, plans to build a model of the Santa Anita Depot.

Six docents trained by Los Angeles State and County Arboretum history curator Sandy Snider led tours through the turn-of-the-century kitchen and station master's living quarters. The authentic period telegraph on the first floor also intrigued train fans.

The Santa Anita Depot, located on the grounds of the Los Angeles State and County Arboretum, is open the first Sunday of each month from 1 to 4 p.m. as well as the regular Tuesday and Wednesday hours of 10 a.m. to 4 p.m.



LuAnn B. Munns

Despite a trunk two feet in diameter, this spotted gum (*Eucalyptus maculata*) succumbed to blasts of wind estimated at 100 mph.

AREA SCHOOLS PLANT TREES ON ARBOR DAY

IF ONE TREE has the cooling effect of five air conditioners, then the Los Angeles State and County Arboretum gave away the equivalent of 4,000 air conditioners to Los Angeles County schools on Arbor Day, March 7. The program, now in its twelfth year, is sponsored by the BankAmerica Foundation, the Atlantic Richfield Foundation, the Oak Tree Foundation and the California Arboretum Foundation.

Tree planting ceremonies centered around Arboretum gift trees were held at over 800 schools from the ABC School District to the Wiseburn School District, from Claremont to Compton and Culver City. The students were shown how to plant a tree and learned, perhaps for the first time, that trees are not only beautiful but are important to their daily lives.

The 1984 tree of the year, the golden trumpet tree (*Tabebuia chrysotricha*), is one of the most successful of the Arboretum introductions. Because it may live for 50 to more than 100 years, it will beautify the campuses as well as act as an educational tool for tens of thousands of students during its lifetime.

The golden trumpet tree, native to the West Indies and Central and South America, was introduced to nurseries in the United States by the Los Angeles State and County Arboretum in 1964.

Director Francis Ching pointed out that the tree chosen for distribution on Arbor Day also helps to educate students about one facet of the Department's activities. "The golden trumpet tree is just one of the hundred or so plants that the Arboretum has brought to Southern California, and we're happy to show the students the effectiveness of our plant introduction program," he said.

The idea of planting a tree and reflecting on its numerous benefits

on a specific day is credited to Nebraska statesman and newspaper owner J. Sterling Morton, who initiated the holiday in 1872. Califor-

nians traditionally celebrate Arbor Day on March 7, the birthday of our most famous horticulturist, Luther Burbank.



LuAnn B. Munns

Arboretum interns Claudia Hartz (center) and Sylvia Reagan (right) help district employees load trees given to Baldwin Park schools for the annual Arbor Day program.



LuAnn B. Munns

Depot Committee members (from left) Mrs. Naoma Clark; chairman Peg (Mrs. Thomas) Dorr; and Dolores (Mrs. Glen) Ross prepare for the first Sunday opening of the Depot.

CELLO, BOOKS LURE MARTEL AWAY FROM PLANT RECORDS

THE CONTEMPLATIVE MAN who says that before he makes any major decision, he first "evaluates it to see what impact it will have on my life," left the Department March 16. After 28 years, Dan Martel plans to play his cello, read the classics and enjoy his retirement any way he chooses.

Mr. Martel joined the Los Angeles State and County Arboretum in 1955 after a year spent in Hawaii as principal cellist in the Honolulu Symphony. Playing with the symphony brought him peace of mind but left him with an empty wallet, he said. In Hawaii, gasoline cost 40 cents a gallon in 1954, compared with 19 cents on the mainland, and everything else was proportionately expensive. Back in Los Angeles, he reapplied to the county civil service office because he had previously spent five years in the County Clerk's office of the Superior Court.

After a half-day interview, he was hired as Arboretum plant recorder. "I had an extensive background in record keeping and I spoke Spanish," he explained. His Spanish paid off; among the Arboretum's clients who needed both his plant knowledge and bilingual ability have been some of Mexico's leading horticulturists and the Mexican minister of public affairs.

One of his first projects as plant recorder was to suggest the original survey of the grounds by crews who recorded all of the plant life so that, for the first time, all the Arboretum plant collections were identified.

In 1979 Mr. Martel accepted another challenge, mapping the en-



LuAnn B. Munns

Dan Martel

tire 127 acres. The toughest part, he says, was finding the quadrat markers, some of which had been buried beneath three feet of dirt or a road for more than 20 years.

For the past 25 years he has also monitored the West San Gabriel Valley weather station located on the grounds, sending copies of his records to the National Weather Service, the Sunnyslope Water District

and others. Among those calling him for information and forecast advice has been TV weatherman Dr. George Fishbeck.

On his retirement, Mr. Martel plans to be more involved than ever with the cello. A musician for over 50 years, he has played under such notables as Eugene Ormandy, Alfred Wallenstein of the Los Angeles Philharmonic and Otto Klemperer. He recorded the soundtracks for numerous motion pictures and was featured with the violinist Jascha Heifetz in "They Shall Have Music." He also recorded several albums.

Among his immediate plans are a series of performances at college musical seminars in Arizona, Montana, Oregon and Northern California. He is also considering an offer to join the highly-rated Guadalajara Symphony in western Mexico. Later travels, he hopes, will lead him to Europe, Rio de Janeiro and Japan. Mr. Martel, a 33-year Naval Reserve veteran, spent 1950 in Japan and looks forward to returning.

A self-described omnivorous reader, he says that much of his time will be occupied by this second love. His favorites are the classics. "Some passages are so beautiful I've read them over and over again. It's like sipping fine wine," he said.

For a man of the world like Dan Martel, his many friends and associates can only wish him the whole world.

Arboretum Weather Summary October 1, 1982 to September 30, 1983

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
Average maximum temperature	83	70	66	70	69	69	71	81	80	92	94	91
Average minimum temperature	55	46	42	45	47	48	47	55	59	61	65	65
Highest temperature	94	83	78	87	82	86	87	94	95	104	105	107
Lowest temperature	45	36	32	34	40	40	40	46	50	57	58	59
Number of clear days	20	15	12	18	13	9	7	10	5	19	18	12
Number of partly cloudy days	9	7	14	6	6	14	19	14	19	10	8	14
Number of cloudy days	2	8	5	7	9	8	4	7	6	2	4	4
Rain each month	.17	5.45	2.04	7.82	4.72	11.65	5.26	.03	.22	0	1.21	1.33
Total rainfall for year	39.9 inches											
Average annual rainfall	18 inches											

Lat. 34 deg. 08' 48" N., Long. 118 deg. 02' 59" W., Elevation 571.28 ft.

By James Bauml

Combretum fruticosum



William Aplin

Caterpillar-like flowers contrast with the shiny leaves of this five-year-old Combretum fruticosum arching over the fence near the Arboretum entrance.

IN AUGUST AND SEPTEMBER, visitors to the Arboretum are treated to an outstanding display of chartreuse to orange brushes on the vining *Combretum fruticosum* north of the entrance Rotunda. Seemingly oblivious to the searing heat and bright sunshine, it carries its many hori-

zontal spikes rigidly over a background of shiny, dark green leaves. It maintains its handsome foliage into the winter, losing leaves only during the coldest season. This choice, colorful climber deserves to be more widely grown and appreciated throughout Southern Califor-

nia. To that end, its history, botany and cultural requirements will be discussed here.

Combretum fruticosum was imported by the Arboretum in October 1964, as seeds from the Carlos Thays Botanical Garden in Buenos Aires, Argentina. By spring of 1968, three

specimens had been planted in the vine collection along the western margin of the grounds. In 1972, plants grown as cuttings from the original seedlings were set out along the fence at the entrance Rotunda. It was chosen as the plant introduction of the year in 1974 and made available thereafter at the Gift Shop and at the Baldwin Bonanza. Later, additional plants were grown from seed planted elsewhere on the Arboretum grounds and distributed to other gardens and nurseries.

Combretum fruticosum belongs to Combretaceae family which contains about 20 genera and 600 species of trees, shrubs, and vines mainly from tropical areas around the world. Some of the better known relatives of *Combretum* include the ornamental vine Rangoon creeper (*Quisqualis indica*) and the tropical almond (*Terminalia catappa*). This genus contains about 200-250 species, ranging from vines to trees, native to the tropics worldwide, except for Australia. *Combretum fruticosum* ("fruticosum" means bushy or shrubby) belongs to a complex of New World vining shrubs with leaves arranged opposite one another on the stem, flower parts in fours or multiples thereof, and most parts of the plants densely covered with small, round membranous scales visible with the naked eye. Differences in flower shape, leaf surfaces, and the color of the dried scales serve to distinguish *C. fruticosum* from closely-related species.

This species ranges from Mexico to Argentina and Brazil. In Brazil, it is said to grow in open spots on the periphery of the tall woods, rarely penetrating the forest margin. The plants occur abundantly on the edges of rivers or pools. Its common name in Brazil is "Escova de macaco" meaning monkey's brush. Other common names throughout Latin America are likewise descriptive: "Escobetilla," little brush; "Mata de Miel," honey plant; and

"Bejuco melero," vine where the honey is. At the Arboretum, sparrows and bushtits perch at the base of the flower stalks and feast on the abundant nectar.

Combretum fruticosum has been described as either a vine or a shrub, but "vining shrub" may be most appropriate. Properly supported, it may spread to 15 feet across and at least 10 feet high. It is evergreen in all but the coldest Southern California winters, withstanding temperatures as low as 26°F. The four-angled branches which arch out in pairs from the older growth are often long and whip-like. Pairs of lax leaves are set two to three inches apart along the branches. The simple, dark green blades are typically lance-shaped with smooth edges and range in size from four to six inches long and from one and one-half to two and one-half inches wide. The one-sided horizontal flower spikes are each three to four inches long. These likewise occur in pairs, either at leaf junctions or in ladder fashion along a side branch. Up to 10 such inflorescence pairs may terminate a single branch, in which case new buds arise at the tip as the oldest flowers fade. When all the flowers have finally dropped, the branches still carry rows of attractive reddish, winged fruits into the fall.

Like the unrelated eucalyptus and mimosa, the showy part of the *Combretum* flowers are the male stamens, made up of the filaments topped by pollen sacs or anthers. In *Combretum*, the eight one-half inch long stamens per flower are multiplied by dozens of tightly packed blooms to create the remarkable greens, yellows and oranges in each "brush."

Surprisingly, such an exotically beautiful plant is quite easy to grow and maintain. It will grow at a moderate rate in either full or half sun. It has only average water requirements, but it should be watered deeply and regularly during the hottest months, especially when in

bloom. It is tolerant of most garden soils, provided it receives at least average drainage. Also, *Combretum* is free from any serious disease or pest problems.

It is used to its greatest landscape advantage trained against a fence or trellis. There it may be lashed with stretching plastic tape or wound through an open lattice. It will cover a support within five years of planting as it did on the fence near the Arboretum entrance. In winter, old flowering stems may be cut back to improve the appearance of the vine. During the growing season, the long vigorous branches may be pruned back to keep the plant in bounds.

Combretum fruticosum has been propagated successfully with fresh seeds planted in the spring and by softwood cuttings taken in spring and summer. Commercially, young plants are saleable in one-gallon containers in six to seven months from seed. When moved to five-gallon pots, these vigorous young plants have been known to flower in 12 to 15 months.

For some unknown reason, this showy vine has languished in obscurity for too long. Of all the modern garden references, only Mildred Mathias' fine *Flowering Plants in the Landscape* even mentions this species. However, at least one large wholesale nursery is now growing *C. fruticosum* from seeds produced at the Arboretum. It has been featured in their latest catalogue, and reports indicate that sales are going well in California and the Gulf States. This is encouraging news. We can look forward to seeing this lovely plant appearing with greater frequency across the flowering California landscape.

James Bauml, taxonomist and senior biologist at the Arboretum, scans about 500 seed lists annually searching for additions to the Plant Introduction Program.



As they emerge from the round buds, the staminate flowers of the Combretum fruticosum are chartreuse, gradually turning gold and then orange as they age.



Visitors pause to admire the dramatic flower stalks of *Agave attenuata* that began blooming for the first time in 20 years last December.

LOS ANGELES STATE AND COUNTY ARBORETUM, Arcadia

- MAY 5 — 5 p.m. to 8 p.m.**
Baldwin Bonanza Preview Party
- MAY 6 — 9 a.m. to 4 p.m.**
Baldwin Bonanza Plant Sale
- MAY 19, 20 — 9 a.m. to 5 p.m.**
Satsuki and Azalea Show
Satsuki and Azalea Society
- MAY 20 — 9 a.m. to 5 p.m.**
Epiphyllum Show
Epiphyllum Society
- MAY 26, 27, 28 — 9 a.m. to 5 p.m.**
Bonsai Show
Santa Anita Bonsai Society
- JUNE 1, 2, 3 — 9 a.m. to 4:30 p.m.**
Fuchsia Show
National Fuchsia Society
- JUNE 9 — Noon to 4:30 p.m.**
Hemerocallis Show
- JUNE 16, 17 — Saturday 1-4 p.m.,
Sunday 9-4:30 p.m.**
Gladiolus Show
So. Calif. Gladiolus Society
- JUNE 29, 30, JULY 1 —
9 a.m. to 4:30 p.m.**
Cactus and Succulent Show
Cactus and Succulent Society of America
- JULY 7, 8 — 9 a.m. to 4:30 p.m.**
Miniature Rose Show
San Gabriel Valley Rose & Horticultural Society
- JULY 21, 22 — Saturday 12-4:30 p.m.,
Sunday 9-4:30 p.m.**
Begonia Show
American Begonia Society, SGV Branch

CALENDAR OF EVENTS

MAY, JUNE, JULY 1984

- JULY 2 through AUGUST 19 —
9 a.m. to 5 p.m. daily**
Art Show
Women Artists of the American West
*All events sponsored by the
California Arboretum Foundation*

DESCANSO GARDENS, La Canada

- MAY 9 through 31 —
9 a.m. to 4 p.m. daily**
Artist of the Month—Betty McMurray
Art Gallery.
- JUNE 1 through JUNE 28 —
9 a.m. to 4:30 p.m.**
Artist of the Month —
Paul Youngman
Art Gallery
- JUNE 3 — 2:30 p.m.**
Madrigal Singers
La Canada High School
- JUNE 3 — 9 a.m. to 4:30 p.m.**
Arts and Crafts Fair
- JUNE 9 through 17 —
9 a.m. to 4:30 p.m.**
Bonsai Show
Descanso Bonsai Society

- JUNE 24 — 2:30 p.m.**
Sweet Adeline Singers
Verdugo Chapter
**NO PROGRAMS SCHEDULED
IN JULY**
*All events sponsored by the
Descanso Gardens Guild*

SOUTH COAST BOTANIC GARDEN, Palos Verdes Peninsula

- MAY 12, 13 — 9 a.m. to 4 p.m.**
Fiesta de Flores Plant Sale
- MAY 19, 20 — Saturday 1-4 p.m.,
Sunday 9-5 p.m.**
Rose Show
South Coast Rose Society
- JUNE 2, 3 — 9 a.m. to 4:30 p.m.**
Fuchsia Show
National Fuchsia Society,
South Bay Branch
- JUNE 10 — 2 p.m.**
"Trees for Urban Lots"
Slides by Don Walker
- JUNE 16, 17 — 9 a.m. to 4:30 p.m.**
Cactus and Succulent Show
South Coast Cactus and
Succulent Society
- JUNE 24 — 2 p.m.**
"Gesneriads for Terrariums"
Demonstration by Bee Sutton
**NO PROGRAMS SCHEDULED
IN JULY**
*All events sponsored by the
South Coast Botanic Garden
Foundation*